Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A method of treating a solution comprising nitrate and a metal halide, comprising:

   (I) subjecting the solution to an electrochemical reduction to thereby reduce the nitrate to ammonia, nitrogen, and nitrite, wherein the solution has a nitrate concentration of at least 500 mg/l and a metal halide content of at least 10 wt% prior to reduction;

   (II) subjecting the solution from step (I) after reduction to an electrochemical oxidation in the presence of the metal halide to thereby oxidize the ammonia to nitrogen, the nitrite to nitrate, and the metal halide to a metal hypohalite; and

   (III) using monitoring an oxidation/reduction potential of the solution as an indicator to discontinue oxidation of step (II) to prevent hypohalite formation exceeding a predetermined concentration, or subjecting the solution from step (II) to an electrochemical reduction to thereby reduce the metal hypohalite to the metal halide.

2. (Original) The method of claim 1 further comprising a step of eluting an ion exchange column to which nitrate is bound with an eluent that includes a metal halide to thereby form the solution comprising the nitrate and the metal halide.

3. (Original) The method of claim 2 further comprising a step of using the solution comprising the metal halide from step (III) to elute the nitrate from the ion exchange resin.

4. (Original) The method of claim 1 wherein the solution comprising the metal halide from step (III) comprises less than 10 mol% of the nitrate contained in the solution of step (I) before reduction, and less than 10 ppm nitrite.

5. (Original) The method of claim 1 wherein at least one of steps (II) +(III) and steps (I) +(II) are performed in a single electrochemical compartment.

6. (Original) The method of claim 1 wherein reduction is performed using an electrode comprising carbon felt.

7. (Original) The method of claim 1 wherein oxidation is performed using an electrode comprising platinized titanium.

8. (Original) The method of claim 1 wherein alkalinity of the solution in steps (I), (II), and (III) is maintained at a value between pH 7.0 and 9.5.

9. (currently amended) A method of reducing a nitrate concentration in a solution, comprising:

providing an anion exchange resin having nitrate anions bound thereto, and eluting the nitrate anions with a metal halide eluent to thereby produce an eluent comprising at least 500 mg/l nitrate ions and at least 10 wt% metal halide ions;

transferring the eluent into a cathode compartment and reducing the nitrate ions in the eluent at a cathode to form ammonia ions and optionally gaseous nitrogen;

transferring the eluent after reduction into an anode compartment and oxidizing at least some of the ammonia ions at the anode to form nitrogen, wherein at least another part of the ammonia ions is oxidized using hypohalite ions that are generated at the same time at the anode from the halide ions; and reducing the hypohalite ions at the cathode to regenerate the metal halide eluent.

10. (Original) The method of claim 9 wherein the step of reducing the nitrate ions produces at least some nitrite ions, and wherein the nitrite ions are oxidized back to nitrate at the anode in the step of oxidizing.

11. (Original) The method of claim 9 further comprising a step of using the regenerated metal halide eluent to elute further nitrate ions from the ion exchange resin.

12. (Original) The method of claim 9 wherein the step of reducing and oxidizing are performed in a cathode and anode compartment that are coupled to each other via a diaphragm.

13. (Original) The method of claim 9 wherein the cathode comprises a carbon felt and the anode comprises platinized titanium.

14. (Original) The method of claim 9 wherein the metal halide is sodium chloride.

15. (Original) The method of claim 9 wherein alkalinity of the eluent is maintained at a value between pH 7.0 and 9.5.

16. (Withdrawn) An apparatus comprising:

an adsorption unit comprising an ion exchange resin configured to provide a nitrate-containing catholyte when the resin is eluted with a solution comprising a metal halide;

an electrolytic cell fluidly coupled to the adsorption unit, the cell further comprising a cathode compartment having a cathode and an anode compartment having an anode, wherein cathode and anode compartment are separated by a diaphragm;

wherein the cathode compartment is configured to receive the catholyte comprising the nitrate and the metal halide, and wherein the cathode is configured to reduce nitrate to nitrogen and ammonia to thereby form an anolyte comprising ammonia and the metal halide;

a fluid conduit coupled to the anode compartment and the cathode compartment and configured to transfer the anolyte from the cathode compartment into the anode compartment; and

wherein the anode in the anode compartment is configured to oxidize the ammonia to nitrogen and the metal halide to a hypohalite.

17. (Withdrawn) The apparatus of claim 16 wherein alkalinity of the eluent is maintained in the electrolytic cell at a value between pH 7.0 and 9.5.

18. (Withdrawn) The apparatus of claim 16 wherein the electrolytic cell is a retrofit to the adsorption unit.

19. (Withdrawn) The apparatus of claim 16 wherein the cathode comprises a carbon felt.

20. (Withdrawn) The apparatus of claim 16 wherein the anode comprises platinized titanium.

21. (Withdrawn) A method of treating a solution comprising nitrate and a metal halide, comprising:

(I) subjecting the solution to an electrochemical reduction to thereby reduce the nitrate to ammonia, nitrogen, and nitrite;

(II) subjecting the gases evolved from the catholyte during step (I) to an absorption step using the anolyte of step (I) to capture the ammonia gas and then subjecting said anolyte to electrochemical oxidation to thereby oxidize the ammonia to nitrogen, and the metal halide to a metal hypohalite; and

(III) using monitoring an oxidation/reduction potential of the solution as an indicator to discontinue oxidation of step (II) to prevent hypohalite formation exceeding a predetermined concentration, or subjecting the solution from step (II) to an electrochemical reduction to thereby reduce the metal hypohalite to the metal;

(IV) using a portion of the catholyte solution from step (I) to capture offgases from step (II) and then subjecting that solution to electrochemical reduction.